REMARKS

Favorable reconsideration and allowance of the present application are respectfully requested in view of the following remarks. In this reply, claims 12 and 29 are cancelled and the features therein are incorporated into independent claims 11 and 29 respectively. Further, claims 37-47 are added. Therefore, claims 1-11, 13-28 and 30-47 are pending. Claims 1, 11, 17, 28 and 38 are independent.

§112, 2ND PARAGRAPH REJECTION

Claim 27 stands rejected under 35 U.S.C. § 112, second paragraph, due to an informal issue. *See Office Action, items 2 and 3 on page 2.* Claim 27 is amended to depend from claim 17 to address this issue. Applicants respectfully request that the rejection of claim 27 based on § 112, second paragraph, be withdrawn.

CLAIM OBJECTION

In the Office Action, claim 22 is objected to due to an informality. *See Office Action, item 4 on page 2.* Based on the comments in the Office Action, it appears that the objection is actually directed to claim 21. As such, claim 21 is amended to address this issue. Applicants respectfully request that the objection to the claims be withdrawn.

§103 REJECTION - BELLEGARDA, MILLIER

Claims 1-8, 11-16, 17-24 and 27-34 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Bellegarda et al. (article entitled "Exploiting Latent Semantic Information in Statistical Language Modeling," dated October 26,

2000) in view of Millier et al. (U.S. Patent No. 5,899,995). *See Office Action, items 6-7 on pages 3-27.* Applicants respectfully traverse.

For a Section 103 rejection to be proper, a *prima facie* case of obviousness must be established. *See M.P.E.P. 2142.* One requirement to establish *prima facie case* of obviousness is that the prior art references, when combined, must teach or suggest all claim limitations. *See M.P.E.P. 2142; M.P.E.P. 706.02(j).* Thus, if the cited references fail to teach or suggest one or more elements, then the rejection is improper and must be withdrawn.

In this instance, the combination of Bellegarda and Millier cannot teach or suggest all features of the invention as claimed. For example, independent claim 1 recites, in part "clustering the files within said space" and "displaying the files in a hierarchical format based on the resulting clusters." In the Office Action, it is admitted that Bellegarda does not disclose the feature of displaying the files in the hierarchical format based on the resulting clusters.

Contrary to the allegation made in the Office Action, Millier does not overcome this difference between Bellegarda and the claimed subject matter. Millier is directed toward automatic organization of information, and in particular, it is directed toward SmartFolders for storing files based on their contents and profiles of usage. *See column 2, lines 52-55.* Millier illustrates an example SmartFolder organization in Figure 2A. Each folder in the SmartFolder structure has a list of constraints and profiles that are created by a user. *See column 7, lines 27-42.* When it is desired to place a file in one of the SmartFolders, the input file or document 510 is processed and compared against the profile 525 and constraints 527. *See Figure 5; column 8, lines 27-38.* If the files satisfy the profile and the constraints, the file is placed into

the appropriate SmartFolder. As illustrated in Figure 7, the SmartFolders are first created by the users in steps 715-725. Once these SmartFolders are created, the documents themselves are individually evaluated and compared against the profiles and constraints of these SmartFolders. In other words, the creation of the SmartFolders themselves is a completely manual process performed by the user. In Millier, the clustering of the files is determined based on the hierarchical structure that is pre-existing.

In contrast, as recited in claim 1, the hierarchical format is based on the clustering of the files. Thus, Millier directly teaches away from the feature as recited. For at least this reason, independent claim 1 is distinguishable over Bellegarda and Millier.

Independent claim 11 recites, in part "wherein the semantic hierarchy is based on clustering of files based on semantic similarities." In other words, the hierarchy is based on the clustering of the files, whereas Millier teaches exactly the opposite. For at least this reason, claim 11 is also distinguishable over Bellegarda and Millier.

Independent claim 17 recites, in part "determining a direct restructure based on determined similarities between the files, and displaying files in hierarchical format based on the determined similarities" and independent claim 28 recites, in part "a processor for analyzing the content of files stored in said file system to map said files into a semantic vector space and cluster the files within said space" and "wherein said user interface displays said files in accordance with said clustering." It is demonstrated above that the combination of Bellegarda and Millier cannot teach or suggest at least these features. Accordingly, independent claims 17 and 28 are distinguishable over Bellegarda and Millier.

Claims 2-8, 13-16, 18-24, 27 and 30-34 depend from independent claims 1, 11, 17 and 28, directly or indirectly. Accordingly, these dependent claims are distinguishable for at least due to their dependencies from independent claims.

Applicants respectfully request that the rejection of claims 1-8, 11-16, 17-24 and 27-34 based on Bellegarda and Millier be withdrawn.

§103 REJECTION - BELLEGARDA, MILLIER, KASUMA

Claims 9-10, 25-26 and 35-36 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Bellegarda in view of Millier, and in further view of Kusama (U.S. Patent No. 7,085,767). *See Office Action, items 8 and 9 on pages 27-32.* Applicants respectfully traverse.

Claims 9-10, 25-26 and 35-36 depend from independent claims 1, 17 and 28, respectively, and it is demonstrated above that these independent claims are distinguishable over Bellegarda and Millier. Kusama cannot correct for at least the above-noted differences between the claimed subject matter and the disclosure of Bellegarda and Millier. Accordingly, independent claims 1, 17 and 28, and therefore the dependent claims 9-10, 25-26 and 35-36, are also distinguishable over Bellegarda, Millier and Kusama.

These dependent claims are also distinguishable on their own merit. For example, claims 9, 25 and 25 all recite that the step of automatically labeling the clusters, based on the resulting clusters. None of Bellegarda, Millier and Kusama teach or suggest this feature.

For at least the reasons stated above, Applicants respectfully request that the rejection of claims 9-10, 25-26 and 35-36 based on Bellegarda, Millier and Kusama be withdrawn.

NEW CLAIMS

Through this reply, claims 37-47 are added. The features of the new claims are all supported in the specification as originally submitted. In other words, no new matter is presented. Claim 37 depends from independent claim 1. Accordingly, claim 37 is distinguishable for at least due to its dependency from claim 1.

Claim 38 recites "a method of organizing a plurality of documents, comprising: mapping all words of the plurality of documents and the plurality of documents a semantic vector space; clustering the plurality of documents to a plurality of clusters based on semantic similarities of the plurality of documents; and outputting the plurality of documents in a hierarchical format based on a result of clustering the plurality of documents." Applicants respectfully submit that the relied upon references, individually or in any combination, cannot teach or suggest all features of claim 38. Accordingly, claim 38 is allowable over the relied upon references. Claims 39-47 are also allowable for at least due to their dependencies from claim 38.
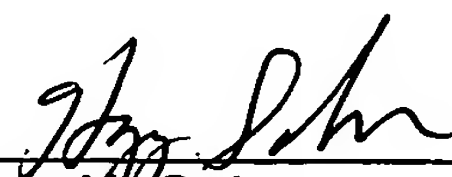
Applicants respectfully request that the new claims be allowed.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: <u>March 21, 2007</u>   By: _____

Hyung M. Sohn
Registration No. 44,346

P.O. Box 1404
Alexandria, VA 22313-1404
703 836 6620